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T R O L L E R S C O N T R O L L E R S C O N T R O L L E R S
N S O R S S E N S O R S S E N S O R S
S T E M S S Y S T E M S S Y S T E M S

samsan
www.samsankorea.com

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Chemical Metering Pump



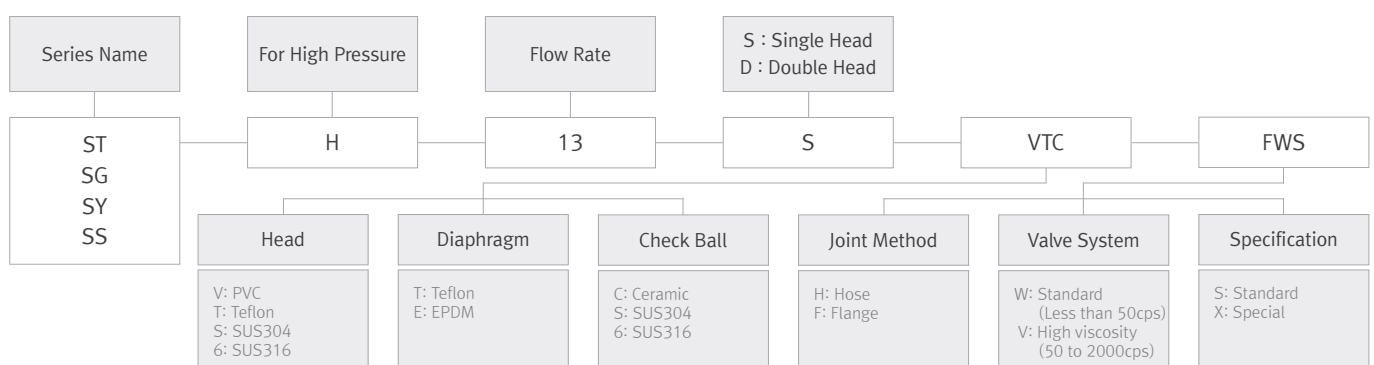
Features

1. Advanced Quality & Lowest Prices.
2. Quick Delivery with prepared stocks of all models.
3. Easy and lowest maintenance fees when repairing.
4. Flow-rate adjustable easily while running.
5. No noise, Excellent durable.
6. Correct flow-rate by dial.
7. Connection type is available among Flange, Hose and Union Type according to conditions of installed places.
8. Liquid-end materials can be chosen among a variety of materials:
Polyvinyl Chloride, Polypropylene, Stainless steel, PVDF, Teflon, Polyethylene according to liquid conditions to handle.

Liquid-End Materials

Parts / Liquid-End Materials	VTC	STS	6T6	TTC
Pump Head	PVC	SUS304	SUS316	Teflon
Diaphragm	PTFE + EPDM	PTFE + EPDM	PTFE + EPDM	PTFE + EPDM
Check Ball	Ceramic	SUS304	SUS316	Ceramic
Ball Seat	PVC	SUS304	SUS316	PTFE
Ball Guide	PVC	SUS304	SUS316	PTFE

Model Code



ST-Type (small capa.)

Wall Mount type! Compact Type



Features

Very easy installation in small space because it's designed as small size, light weight with wall mount.

No modification by long time operation because all of each liquid-end parts are precisely manufactured with suitable materials according to chemical compatibility.

Very easy, correct and precise control to be designed as flow rate control type with control cam.

Very economic type of minimum electric consumption by simple operation structure.

Specifications

Test Conditions: water/25°C

		ST-50	ST-100	ST-150	ST-300	ST-600	ST-1000	
Max. Discharge Capacity (cc/min)	50Hz	42	85	125	250	500	916	
	60Hz	50	100	150	300	600	1100	
Max. Discharge Pressure (kgf/cm ² G)		15	10	5		3	3	
Connection(mm)	Hose	6ø x 10ø					8ø x 12ø	
	Flange	15A Hose Flange						
Motor	Spm	46	92	46	92	92	132	
	Standard	AC220V / 1ø / 50Hz or 60Hz / Shading Coil Motor						
Approx. Weight(kg)		2.7		2.8		3.1	3.4	

Standard Accessories

Name	Q'ty	Name	Q'ty
Siphon Check Valve	1 ea	Anchor Bolt / Nut	2 sets
Foot Strainer	1 ea	Dial Protection Cap	1 ea
Hose	3m	Wall Mount Bracket	Option

Applicable only for end-mat'l(-VTC) & Hose type



SG-Type (small/medium capa.)

No Motor?
It's **Built-In!**

No Noise,
Excellent Durable Pump



Features

Vertical type designed suitably in small space.

No continuous supply of oil by special grease suitable in low speed and high load conditions. Very silent operation by gear motor and protected from dropping of chemical or ambient humidity by designed as motor built-in type.

Very easy, correct and precise control to be designed as flow rate control type with control cam.

No Modification by long time operation because all of each liquid-end parts are precisely manufactured with suitable materials according to chemical compatibility.

Specifications

Test Conditions: water/25°C

		SG-30	SG-60	SG(H)-150	SG(H)-300	SG-600	SG-1200	SG-2000
Max. Discharge Capacity (cc/min)	50Hz	30	62	141	283	516	1,166	1,666
	60Hz	36	75	170	350	620	1,400	2,000
Max. Discharge Pressure (kgf/cm ² G)		15	15	5(10)	5(10)	5	5	5
Connection(mm)	Hose	6ø x 10ø					8ø x 12ø	10ø x 15ø
	Flange	15A Flange						
Motor	Spm(50/60)Hz	30/36	60/72	30/36	60/72	60/72	60/72	84/100
	Out-Put	15W				25W	40W	60W
	Standard	AC220V / 1ø / 50Hz or 60Hz / Gear Motor						
	Option	AC110V / 1ø / 60Hz(50Hz) / 25W AC220V / 1ø / 60Hz(50Hz) / 25W AC220V / 3ø / 60Hz(50Hz) / 25W AC380~440V / 3ø / 60Hz(50Hz) / 25W				AC110V / 1ø / 60Hz(50Hz) AC220V / 3ø / 60Hz(50Hz) AC380V / 3ø / 60Hz(50Hz) AC440V / 3ø / 60Hz(50Hz)		
Approx. Weight(kg)		5.6		5.7		6.3	9.5	10.2

Standard Accessories

Name	Q'ty	Name	Q'ty
Siphon Check Valve	1 ea	Anchor Bolt / Nut	2 sets
Foot Strainer	1 ea	Dial Protection Cap	1 ea
Hose	3m		

Applicable only for end-mat'l(-VTC) & Hose type



SY-Type (midium capa.)

Powerful!

Middle Capacity Pump
of Vertical Type



Features

Excellent durability by worm gear operation type and suitable for small and big discharge capacity.

Very convenient with various kinds of voltages of 220V, 380V, 440V.

Vertical type designed suitably in small space.

No modification by long time operation because all of each liquid-end parts are precisely manufactured with suitable materials according to chemical compatibility.

Specifications

Test Conditions: water/25°C

		SY-80	SY-150	SY-300	SY-600	SY-13	SY-23	SY-33	SY-53	SY-73	SY(H)-14
Max. Discharge Capacity (cc/min)	50Hz	70	140	310	630	1,080	2,160	3,160	5,000	6,250	10,400
	60Hz	85	170	380	760	1,300	2,600	3,800	6,000	7,500	12,400
Max. Discharge Pressure (kgf/cm ² G)		15	15	10	10	10	8	5	5	5	3(5)
Connection (mm)	Hose	Soft PVC 6Ø x 10Ø				Soft PVC 10Ø x 15Ø		25A Flange			
	Flange	15A Flange									
Motor	Spm(50/60)Hz	48/57	95/114	48/57	95/114	48/57	95/114	48/57		95/114	
	Standard	AC220V, 380V / 3Ø / 50Hz or 60Hz / 0.2Kw / In-Door						AC220V, 380V / 3Ø / 50Hz or 60Hz / 0.4Kw / In-Door			
	Option	AC220V, 380V / 3Ø / 50Hz or 60Hz / 0.4Kw AC440V / 3Ø / 50Hz or 60Hz / 0.4Kw						AC440V / 3Ø / 50Hz or 60Hz / 0.4Kw(0.75Kw)			
Approx. Weight(kg)		10.5		11		11.7		18.5	19		23

SS-Type (big capa.)

Big Capacity!

Big Capacity
with correct discharge
in big process line



Features

Excellent durability by worm gear operation type and suitable for big capacity.
Very convenient with various kinds of voltages of 220V, 380V, 440V
Keeping safe using against big capacity by design with needle bearing
No modification by long time operation because all of each liquid-end parts
are precisely manufactured with suitable materials according to chemical compatibility.

Specifications

Test Conditions: water/25°C

		SS-14	SS-24	SS-34	SS-54
Max. Discharge Capacity (L/Min)	50Hz	11.6	20	26.6	45
	60Hz	14	24	32	54
Max. Discharge Pressure (kgf/cm ² G)		7	3(7)	5	3
Connection (Flange)		KS10K40A			KS10K50A
Motor	Spm(50/60)Hz	48/57	95/114		
	Standard	AC220,380V / 3ø / 60Hz / 0.75Kw		AC220,380V / 3ø / 60Hz / 1.5Kw	
	Option	AC220V,380V/3ø/50 or 60Hz/1.5Kw AC440V/3ø/50 or 60Hz/1.5Kw		AC220V,380V/3ø/50Hz AC440V/3ø/50Hz eG3, d2G4	
Approx. Weight (Kgs)		87	89	92	100

SP-Type (plunger)

Plunger Pump! For High Pressure



Features

- Possible to inject with high Pressure up to 50Kgf/cm²G
- Possible to inject very precisely
- Also possible to inject a very small discharge capacity less than 10cc/min.

Specifications

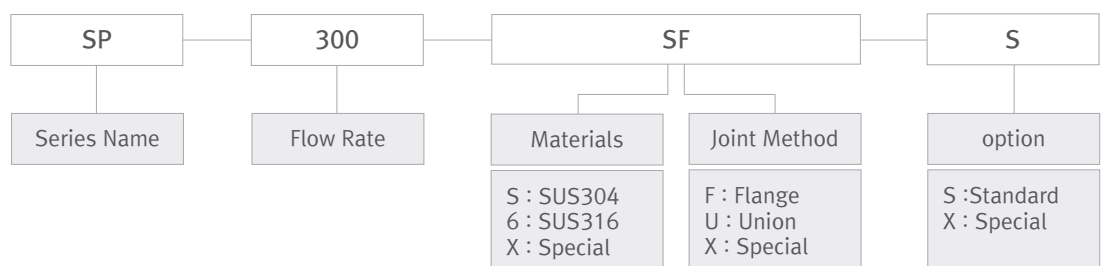
Test Conditions: water/25°C

		SP-10	SP-20	SP-50	SP-100	SP-300	SP-600	SP-1000	SP-2000
Max. Discharge Capacity (cc/min)	50Hz	12	23	52	104	300	600	1,040	2,000
	60Hz	14	28	62	125	360	720	1,250	2,400
Max. Discharge Pressure(kgf/cm ² G)		50	50	50	30	20	10	10	7
Connection		PT1/4" or 15A FLANGE				PT3/8" or 15A FLANGE		PT1/2" or 15A FLANGE	
Motor	STANDARD	AC220V,380V Dual/3ø/60Hz/0.4KW							
	OPTION	- AC440V/3ø/60Hz/0.4KW - 50Hz							

Liquid-end materials

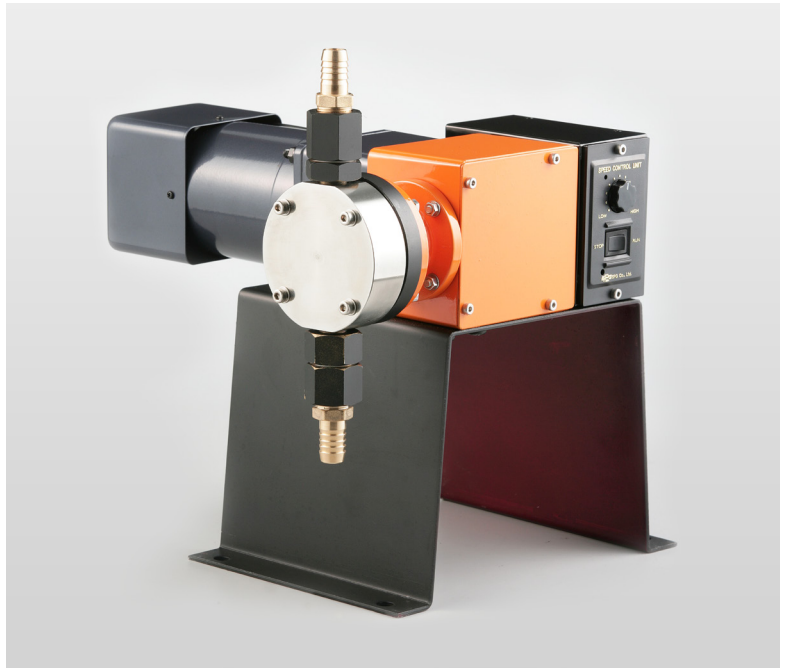
Parts	PUMP HEAD	CHECK BALL	BALL GUIDE	BALL SEAT	UNION NUT	JOINT	PACKING	PLUNGER
Materials	SUS304	SUS304	SUS304	SUS304	SUS304	SUS304	PTFE	SUS304
	SUS316	SUS316	SUS316	SUS316	SUS316	SUS316		SUS316

Model Code



SV-Type (for high viscosity)

Metering Pump for high viscosity!



Features

Strong Suction & Discharge due to transmission by connecting rod

Very easy pumping of high viscosity liquid like Honey, Glue, Bond, Engine Oil, Lubricant that's difficult to inject with general metering pump.

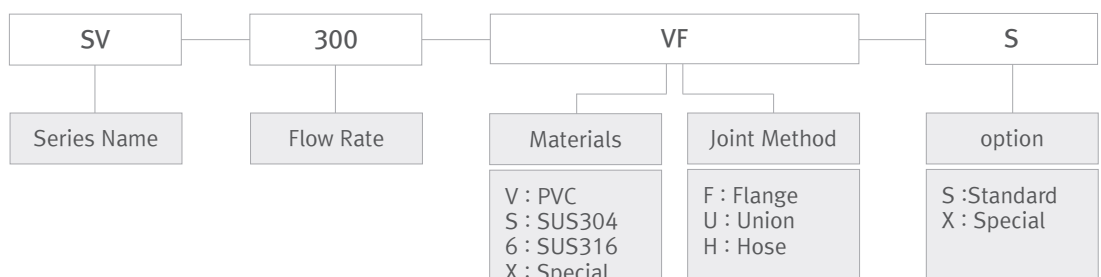
Very easy adjustment of discharge capacity while running by control of motor speed with speed controller and inverter
 Keeping constant discharge capacity against the change of liquid viscosity according to temperature change in 4 seasons.

Specifications

Test Conditions: water/25°C

		SV-100	SV-300	SV-500	SV-1000	SV-2000
Max. Discharge Capacity (cc/min)	50Hz	110	280	480	1,040	1,660
	60Hz	130	340	580	1,250	2,000
Max. Discharge Pressure(kg ^f /cm ² G)		10	5		3(5)	
Connection(mm)	Hose	ø10	ø16			
	Flange	15A FLANGE				
Motor	OUT-PUT	90W			120W(180W)	
	STANDARD	AC220V / 1ø / 50Hz or 60Hz / In-Door / Speed Control Motor				
	OPTION	- Control : INVERTOR - AC220V/3ø/60Hz(50Hz)/90W - AC380V or AC440V/3ø/60Hz(50Hz)/90W - AC220V/3ø/60Hz(50Hz)/120W - AC380V or AC440V/3ø/60Hz(50Hz)/120W - AC220V/3ø/60Hz(50Hz)/180W - AC380V or AC440V/3ø/60Hz(50Hz)/180W				

Model Code



Accessories (Chemical Metering Pump)



Air Chamber

Metering pump, as a kind of reciprocating pump, make a pulsation by continuous moving with suction and discharge. Air Chamber is used for reduction of these pulsations and continuous flowing.

MODEL	Measurement (cm ³)	Max. Pressure (bar)	
		PVC	SUS
AC-15A	500	10	10
	1,000	10	10
	2,000	10	10
AC-25A	3,000	10	10
	5,000	10	10
AC-40A	10,000	9	10
AC-50A	over than 20,000	5	10



Back Pressure Valve

Back Pressure Valve is used for preventing that discharge volume is over injected by over-feeding or siphon phenomenon according to piping condition in the site and continuous leakage while stopping.

MODEL	Pressure Control Range (bar)	Standard Setting Pressure (bar)
BV-15A	0.5~3	1
BV-25A	0.5~3	1
BV-40A	0.5~3	1
BV-50A	0.5~3	1

For Small Capacity Pump



Back Pressure/Relief/Siphon Check Valve



Air Chamber (For small Capacity)

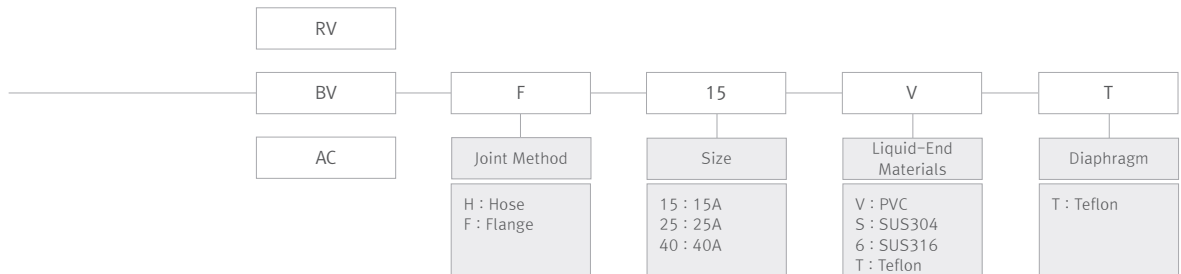


Relief Valve

Relief valve is used for preventing a breakage of pipe and pump by automatically opening when over-pressure is made by closing of pipe due to clogging-up of some dregs or closing of valve.

MODEL	Pressure Control Range (bar)	Standard Setting Pressure (bar)
RV-15A	3~10	5
RV-25A	3~7	5
RV-40A	3~7	5
RV-50A	3~5	3

Model Code



Selection and Installing of Siphon Check Valve

: Siphon Check Valve is used for preventing a siphon phenomenon and an over-feeding due to inertia resistance.

1. What is siphon phenomenon ?
This is phenomenon liquid is continuously flowed due to vacuum inside hose & pipe by stopping of pumping when the injection level is lower than liquid level.
2. Install at injecting point in followings.
- No pressure at injecting point and when it's injected to lower than liquid level of tank
- In case that it's injected at the point that has siphon phenomenon (Notice) The back pressure of Siphon Check Valve is approx. 1kgf/Cm2.
3. Basically, you don't need an installing of Siphon Check Valve at site that the pressure is over than 0.5kgf/Cm2 at injecting point, But the leakage of liquid can be prevented as installing Siphon Check Valve though it temporarily has minus-pressure.



1. Strainer
2. Power Connecting box
3. Dial Scale
Protection Cap
4. Wall Mount Bracket



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Water Quality Controllers

Advanced **samsan controller** with microprocessor!



Condensed in a compact DIN size(96x96mm), versatile functions provide more simplicity in operation and more efficiency in performance, in addition to accurate monitoring results. With the appropriate sensors and accessories, SAMSAN CONTROLLER can serve as the most suitable and cost effective monitoring system to meet process, water and control applications.

Features

1. With microprocessor control functions and design of one touch button, you can get more effective, reliable data and very simple setting.
2. Designed for using out-put of signal and alarm (DC 4~20mA or 1~5V and others).
3. With 3 or 4Digit Digital Display, Reading & Setting are very simple by appearance of each message.
4. Isolator is equipped for transmission of stable data with isolated DC4~20mV, 1~5V output and you can connect with personal computer and data logger directly.
5. Designed to set high and low alarm for controlling of water quality in process, waste water and your applications.
6. Equipped with Automatic Temperature Compensation for more accurate monitoring results and appearance.
7. DIN (96x96mm)size for simple installation and maintenance.
8. Equipped with power switch for protection of controller by ON/OFF of power supply while setting or A/S.
9. Equipped with EEPROM, SAMSAN CONTROLLER can hold all set values of preset parameters while power is OFF and when power become ON, they can continue to measure and monitor with all values set before.

pH/ORP Controller

LED Type



Specifications

Model	CRN-96 pH	CRN-96 ORP
Range	0.0 ~ 14.0pH	± 999mV
Sensitivity Adjustment	0.0 ~ 4.0pH (± 2.0pH)	1 ~ 500mV (± 250mV)
Shift	± 2.0pH	± 200mV
Accuracy	0.1pH ± 1digit	10mV ± 1digit
Ambient Temperature	-5 °C ~ 45 °C	-5 °C ~ 45 °C
Output	DC4 ~ 20mA (Option: Isolation)	DC4 ~ 20mA (Option: Isolation)
Alarm	High, Low Relay (1a1b)	High, Low Relay (1a1b)
Panel Cut	92(W) x 92(H) mm	92(W) x 92(H) mm
Power Source	AC100/220V ± 10%, 50/60Hz	AC100/220V ± 10%, 50/60Hz

FND(2 Relays) FND(4 Relays)



Specifications

Name	pH(ORP) Indicating Controller(2Relays)	pH(ORP) Indicating Controller(4Relays)
Model	samsanK.com-96pH(ORP)-F2	samsanK.com-96pH(ORP)-F4
Display(FND)	0 ~ 14.00 pH (-1999mV ~ +1999mV)	
Accuracy	Within 0.5% F.S	
Repeatability	Within 0.5% F.S	
Range	pH(ORP)	0 ~ 14.00 pH (-1999mV ~ +1999mV)
	Temperature	0 ~ 100°C
Using Temperature	-5°C ~ 45°C	
Using Humidity	Less than 90%RH	
Temperature Compensation	0 ~ 100°C	
Sensor Calibration	Manual and Auto Calibration	
Reponse Time	Within 30 sec.	
Power	AC85V ~ AC250V / 50/60Hz / Free Voltage	
Out-Put	Analog Output	DC4-20mA / ISOLATION
	Communication	AUTO HOLD...Sensor Cleaning Out-Put
Relay(Alarm)	2-RELAY SPDT-Relay AC250V3A MAX.	4-RELAY SPDT-Relay AC250V3A MAX.
	Available with Cleaning Out-Put & Time Proportional Out-Put	
Power Consumption	Approx. 5VA	
Case Mat'ls	Case	STEEL
	Front	ABS
	Key Pad	Membrane
Size	96 X 96 X 110mm	
Weight	Approx. 0.5kg	
Installation	PANEL MOUNT TYPE	

pH/ORP Controller

LCD(2 Relays)
LCD(4 Relays)



Specifications

Name		pH/ORP Indicating Controller(2Relays)	pH/ORP Indicating Controller(4Relays)
Model		samsanK.com-96pH(ORP)-L2	samsanK.com-96pH(ORP)-L4
Display(LCD)		0 ~ 14.00 pH (-1999mV ~ +1999mV)	
Accuracy		Within 0.5% F.S	
Repeatability		Within 0.5% F.S	
Range	pH(ORP)	0 ~ 14.00 pH (-1999mV ~ +1999mV)	
	Temperature	0 ~ 100°C	
Using Temperature		-5°C ~ 45°C	
Using Humidity		Less than 90%RH	
Temperature Compensation		0 ~ 100°C	
Sensor Calibration		Manual and Auto Calibration	
Reponse Time		Within 30 sec.	
Power		AC85V ~ AC250V / 50/60Hz / Free Voltage	
Out-Put	Analog Output	DC4~20mA / ISOLATION AUTO HOLD---Sensor Cleaning Out-Put	
	Communication	-	RS-485
Relay(Alarm)		2-RELAY SPDT-Relay AC250V3A MAX.	4-RELAY SPDT-Relay AC250V3A MAX.
Power Consumption		Approx. 5VA	
Case Mat'ls	Case	STEEL	
	Front	ABS	
	Key Pad	Membrane	
Size		96 X 96 X 110mm	
Weight		Approx. 0.5kg	
Installation		PANEL MOUNT TYPE	

Accessories

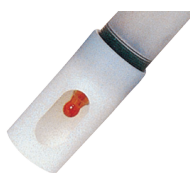
SUBMERSIBLE HOLDER



SH-10

Very suitable to use constantly and for long time due to self-filling type by atmospheric pressure

COMBINATION ELECTRODES



Sensors

Please refer to pH sensor page

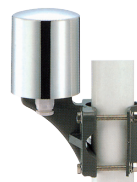
CABLE



SC-10

Exclusive cable for pH/ORP controller that can be isolated from any static induced noises.

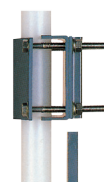
CONNECTOR BOX



SCB-10

For expanding over 3m between the controller and the submersible holder with sensor, install the connector box near the submersible holder and in that case surely connect with SAMSAN exclusive cable.

BRACKET



SB-10

CALIBRATION SET

pH7

Powder (for 250cc) 1 Pack

pH4

Powder (for 250cc) 1 Pack

Kcl

Powder (for 500cc) 1 Pack

In case of assembly with sensor, Kcl solution will be filled inside the holder

Please refer to pH sensor page

Dissolved Oxygen

LED Type



Specifications

Model	CRN-96 DO
Range	0.0 ~ 15.0 or 0.0 ~ 20.0ppm
Sensitivity Adjustment	0.1 ~ 1.0ppm (±0.5ppm)
Shift	±2.0ppm
Accuracy	±2% Full Scale
Ambient Temperature	-5°C ~ 45°C
Output	DC4 ~ 20 mA (Option: Isolation)
Alarm	High, Low Relay (1a1b)
Panel Cut	92(W) x 92(H) mm
Power Source	AC100/220V ±10%, 50/60Hz

FND(2 Relays)·FND(4 Relays)



Specifications

Name		DO Indicating Controller(2Relays)	DO Indicating Controller(4Relays)
Model		samsanK.com-96DO-F2	samsanK.com-96DO-F4
Display(FND)		0 ~ 20.00 ppm	
Measuring Type		Membrane Galvanic type	
Accuracy		Within ±1.5% F.S (Under same temperature)	
Repeatability		Within 1% F.S (Under same temperature)	
RANGE	DO	0 ~ 20.00 ppm (Resolution:0.01ppm)	
	Temperature	0 ~ 100°C	
Using temperature		-5°C ~ 45°C	
Using Humidity		Less than 90%RH	
Temperature Compensation		0 ~ 40°C	
Sensor Calibration		Calibration with ZERO-water, SATURATION-water, Atmosphere Calibration, Manual Calibration	
Response Time		90%Response 60 sec.(Under same temperature)	
Power		AC85V ~ AC250V / 50/60Hz / Free Voltage	
Out-Put	Analog Output	DC4-20mA / ISOLATION	
	Communication	AUTO HOLD...Sensor Cleaning Out-Put	
Relay(Alarm)		2-RELAY SPDT-Relay AC250V3A MAX.	4-RELAY SPDT-Relay AC250V3A MAX.
Power Consumption		Approx. 5VA	
Case Mat'ls	Case	STEEL	
	Front	ABS	
	Key Pad	Membrane	
Size (mm)		96 X 96 X 110mm	
weight		Approx. 0.5kg	
Installation		PANEL MOUNT TYPE	

Dissolved Oxygen

LCD(2 Relays)·LCD(4 Relays)



Specifications

Name		DO Indicating Controller(2Relays)	DO Indicating Controller(4Relays)
Model		samsanK.com-96DO-L2	samsanK.com-96DO-L4
Display(LCD)		0 ~ 20.00 ppm	
Measuring Type		Membrane Galvanic type	
Accuracy		Within ± 1.5% F.S (Under same temperature)	
Repeatability		Within 1% F.S (Under same temperature)	
RANGE	DO	0 ~ 20.00 ppm (Resolution:0.01ppm)	
	Temperature	0 ~ 100°C	
Using temperature		-5°C ~ 45°C	
Using Humidity		Less than 90%RH	
Temperature Compensation		0 ~ 40°C	
Sensor Calibration		Calibration with ZERO-water, SATURATION-water, Atmosphere Calibration, Manual Calibration	
Response Time		90%Response 60 sec.(Under same temperature)	
Power		AC85V ~ AC250V / 50/60Hz / Free Voltage	
Out-Put	Analog Output	DC4~20mA / ISOLATION AUTO HOLD...Sensor Cleaning Out-Put	
	Communication	-	RS-485
Relay(Alarm)		2-RELAY SPDT-Relay AC250V3A MAX.	4-RELAY SPDT-Relay AC250V3A MAX.
		Available with Cleaning Out-Put & Time Proportional Out-Put	
Power Consumption		Approx. 5VA	
Case Mat'ls	Case	STEEL	
	Front	ABS	
	Key Pad	Membrane	
Size (mm)		96 X 96 X 110mm	
weight		Approx. 0.5kg	
Installation		PANEL MOUNT TYPE	

Accessories

PROBE



SP-20

1. Type: Submersible or flow-through type
2. Measuring Liquid Temp: 0~40°C
3. Liquid-end materials: PVC

CHIP



Specifications

MODEL	CHIP for CRN-96 DO
Type	Cartridge change & Disposal Type
Response	90% response within 60 seconds
Measuring Liquid	Temp: 0~40°C Pressure: 0~1.0kg/cm ² (0~0.1MPa) Possible to measure in the depth of water 10m Flow speed: Over than 25 cm/sec
Membrane	Liquid-end materials: PTFE, Thickness: 25μm
Probe	SP-20

Residual Chlorine

LED Type



Specifications

Model	CRN-96 RC
Range	0.0~2.0ppm(Option: 0.0~5.0/10.0ppm)
Sensitivity Adjustment	0.1~0.6ppm (±0.3ppm)
Shift	±0.5ppm
Accuracy	±3% Full Scale
Ambient Temperature	-5℃~45℃
Output	DC4~20mA (R.LO~500Ω), DC1~5V
Alarm	High, Low Relay (1a1b)
Panel Cut	92(W) x 92(H) mm
Power Source	AC100/220V ±10%, 50/60Hz

FND(2 Relays)·FND(4 Relays)



Specifications

Name		RC Indicating Controller(2Relays)	RC Indicating Controller(4Relays)
Model		samsanK.com-96RC-F2	samsanK.com-96RC-F4
Display(FND)		0 ~ 5.00 ppm	
Measuring Type		Galvanic Type	
Accuracy		Within ±1.5% F.S	
Repeatability		Within 0.5% F.S	
Range	Residual Chlorine	0 ~ 5.00 ppm (Resolution:0.01 ppm)	
	Temperature	0 ~ 100℃	
Using Temperature		-5℃ ~ 45℃	
Using Humidity		Less than 90%RH	
Temperature Compensation		0 ~ 100℃	
Sensor Calibration		ZERO, SPAN Calibration	
Power		AC85V ~ AC250V / 50/60Hz / Free Voltage	
Out-Put	Analog Output	DC4~20mA / ISOLATION	
	Communication	-	AUTO HOLD...Sensor Cleaning Out-Put
Relay(Alarm) Relay(Alarm)		2-RELAY SPDT-Relay AC250V3A MAX.	4-RELAY SPDT-Relay AC250V3A MAX.
Power consumption		Approx. 5VA	
Case Mat'ls	Case	STEEL	
	Front	ABS	
	Key Pad	Membrane	
Size		96 X 96 X 110mm	
Weight		Approx. 0.5kg	
Installation		PANEL MOUNT TYPE	

Residual Chlorine

LCD(2 Relays)·LCD(4 Relays)



Specifications

Name		RC Indicating Controller(2Relays)	RC Indicating Controller(4Relays)
Model		samsanK.com-96RC-L2	samsanK.com-96RC-L4
Display(LCD)		0 ~ 5.00 ppm	
Measuring Type		Galvanic Type	
Accuracy		Within $\pm 1.5\%$ F.S	
Repeatability		Within 0.5% F.S	
Range	Residual Chlorine	0 ~ 5.00 ppm (Resolution:0.01 ppm)	
	Temperature	0 ~ 100°C	
Using Temperature		-5°C ~ 45°C	
Using Humidity		Less than 90%RH	
Temperature Compensation		0 ~ 100°C	
Sensor Calibration		ZERO, SPAN Calibration	
Power		AC85V ~ AC250V / 50/60Hz / Free Voltage	
Out-Put	Analog Output	DC4~20mA / ISOLATION	
	Communication	AUTO HOLD...Sensor Cleaning Out-Put	
Relay(Alarm) Relay(Alarm)		2-RELAY SPDT-Relay AC250V3A MAX.	4-RELAY SPDT-Relay AC250V3A MAX.
		Available with Cleaning Out-Put & Time Proportional Out-Put	
Power consumption		Approx. 5VA	
Case Mat'ls	Case	STEEL	
	Front	ABS	
	Key Pad	Membrane	
Size		96 X 96 X 110mm	
Weight		Approx. 0.5kg	
Installation		PANEL MOUNT TYPE	

Accessories

HOLDER



SRH-10

- Flow Rate: 0.5 ~ 1.0L/min
- Pressure: Inside (Less than 3Kgf/cm²)
Outside (Atmosphere)
- Materials: Acryl
- Attachable with pH sensor (SPH-200V) and ORP sensor (SOR-400V)

SENSOR



SCR-600

- No reagent type by galvanic method
- Measuring of extricated residual chlorine
- Conditions of measuring liquid
 - Temperature: 0~40°C
 - Flow: 0.5~1.0L/min
 - pH: 6~8pH
- Liquid-end materials: PVC
- Sensor's materials
 - Anode: Pt
 - Cathode: Ag·Agcl
- Lead cable: 5m
(Possible to extend by 30m with our exclusive cable and connect box)

Conductivity / P Controller / pH Checker

LED Type



P Controller



Specifications

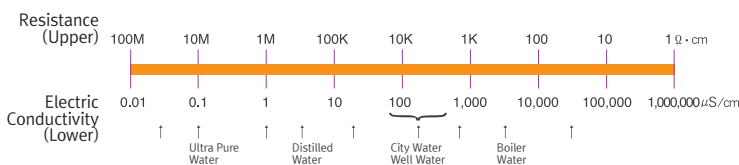
Model	CRN-96 EC	
Range	2 Electrode	5 / 20 (Option: 100, 500, 1000) $\mu\text{S}/\text{cm}$
	4 Electrode	1.0 / 2.0 / 5.0 / 10.0 / 20.0 ms/cm
Sensitivity Adjustment	Full scale 1~20% ($\pm 10\%$)	
Shift	Full scale $\pm 10\%$	
Accuracy	$\pm 1\%$ Full Scale	
Ambient Temperature	$-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$	
Output	DC4~20mA (Option: Isolation)	
Alarm	High, Low Relay (1a1b)	
Panel Cut	92(W) x 92(H) mm	
Power Source	AC100/220V $\pm 10\%$, 50/60Hz	

Specifications

Model	CRN-96 PD-P	CRN-96 R-P
Range	0.0~14.0pH	0.0~2.0ppm
Input	pH Sensor	CL Sensor
Output	DC4~20mA	DC4~20mA
Alarm	High, Low Relay (1a1b) 250V 5A (High, Low Relay S/W)	High, Low Relay (1a1b) 250V 5A (High, Low Relay S/W)
Display	Meas / Set / Cont	Meas / Set / Cont
Auto / Man	S/W	S/W
Man	VR0~100% (4~20mA)	VR0~100% (4~20mA)
P Band	20~500%	20~500%
Shift	0~50%	0~50%
Ambient Temperature	$-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$	$-5^{\circ}\text{C} \sim 45^{\circ}\text{C}$
Panel Cut	92(W) x 92(H) mm	92(W) x 92(H) mm
Power Source	AC100/220V $\pm 10\%$, 50/60Hz	AC100/220V $\pm 10\%$, 50/60Hz

Accessories

ELECTRIC CONDUCTIVITY PRINCIPLE



SENSORS 4 ELECTRODE



SE-30/P4

1. Measuring liquid temperature: 0~50°C
2. Liquid-end materials: Case (PVC) Electrode (SUS 316)
3. Flow-through type or screw type
4. Lead cable: 5m (Standard)

SENSORS 2 ELECTRODE



SE-30/P2

1. Measuring liquid temperature: 0~50°C
2. Liquid-end materials: Case (PVC) Electrode (SUS 316)
3. Screw type (PT3/4)
4. Lead cable: 5m (Standard)

pH Checker



Features

- Low cost, pocket size simulators for pH 4.00, 7.00 and 10.00
- These checker are easy to use and provide quick way for checking the performance of any pH instruments.
- Press "HI Ohm" high impedance mode to simulate an Electrode.
- Compact case features push button range selector switch for one hand operation.
- Bright red LED indicate simulation range or when battery power falls below a specific level.

Specifications

Range	pH 4.00, 7.00, 10.00
Accuracy	$\pm 0.1\%$
Power	9V DC
Dimensions	75 x 100 x 30 mm
Weight	250g

Standard Accessories

9V Battery / Calibration wire / Instruction manual / Gift box

Auto Calibration - pH/ORP

Auto Calibration



Features

1. DIN 96x96 size
2. Auto-calibration with one touch button
3. Auto-knowledge of no good quality sensor
4. Proportional controlling with On-off output or time is in your choice
5. Memory back up available

Specifications

MODEL	OTTO CAL 96 pH	OTTO CAL 96 ORP
Measuring Range	pH 0~14pH / Division 0.01pH	±999 mV / Division 1mV
Accuracy	±0.1pH ±1digit	±10 mV ±1digit
Calibration	Automatic & Manual Calibration of pH4~7, pH7~9 as One-touch	Automatic & Manual Calibration of 250 mV as One-touch
	Automatic Knowledge of No Good Quality Sensor	Automatic Knowledge of No Good Quality Sensor
Control Output	On-Off, High / Low Relay(1a1b) Rating: AC250V Resistive Load: Max. 5A Sensitivity Adjustment: 0.1~4.0pH (±2pH) Shift: ±1.99pH	On-Off, High / Low Relay(1a1b) Rating: AC250V Resistive Load: Max. 5A Sensitivity Adjustment: 10~400 mV (±200 mV) Shift: ±199 mV
Ambient Temp. / Humidity	Less than -5°C ~ 45°C, 85% RH	Less than -5°C ~ 45°C, 85% RH
Power	AC100/220V dual, 50/60Hz	AC100/220V dual, 50/60Hz
Structure	Panel Mount Type, In-door Type	Panel Mount Type, In-door Type
Mat'ls	1. Case: SPCC 2. Panel: ABS	1. Case: SPCC 2. Panel: ABS
Panel Cut	92(W) x 92(H) mm	92(W) x 92(H) mm
Weight	Approx. 700g	Approx. 700g

Accessories

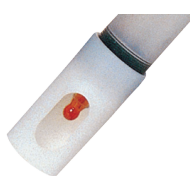
SUBMERSIBLE HOLDER



SH-10

Very suitable to use constantly and for long time due to self-filling type by atmospheric pressure

COMBINATION ELECTRODES



Sensors

Please refer to pH sensor page

CABLE



SC-10

Exclusive cable for pH/ORP controller that can be isolated from any static inducted noises.

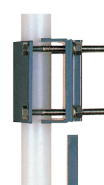
CONNECTOR BOX



SCB-10

For expanding over 3m between the controller and the submersible holder with sensor, install the connector box near the submersible holder and in that case surely connect with SAMSAN exclusive cable.

BRACKET



SB-10

CALIBRATION SET

pH7

Powder (for 250cc) 1 Pack

pH4

Powder (for 250cc) 1 Pack

Kcl

Powder (for 500cc) 1 Pack

In case of assembly with sensor, Kcl solution will be filled inside the holder

Please refer to pH sensor page

Portable/Bench type for lab.

SX600 Series of Water-proof Pen Testers

SX610 pH Tester

Range : 0 to 14.00pH
Accuracy : ± 0.1 pH, ATC (No temp. display)

SX620 pH Tester

Range : -1.00 to 15.00pH
Accuracy : ± 0.01 pH, ATC

SX630 ORP Tester

Range : ± 1999 mV
Accuracy : $\pm 0.2\%$ FS

SX650 Conductivity / Resistivity / TDS / Salinity Tester

Range : 0 to 50mS/cm
Accuracy : $\pm 1.0\%$ FS, ATC

The smallest and thinnest shape:

148x29x14mm.

The diameter of the electrode: 10mm.

The single button operation, easy to use.

The intelligent function: automatic identification of calibration solution, automatic calibration, automatic temperature compensation, automatic range switches, automatic power off, low voltage alarm, pH electrode invalidation display and etc.

The reliable structure design: the meter meets IP57 water-proof. Replaceable electrodes and a portable case. The high cost-effectiveness.



Standard Solution and Batteries in Portable Case



Replaceable Electrode







Meets IP57 waterproof



Replaceable Batteries



Electrode Diameter: 10mm, Ability to test in Test Tube

Model				
Measurement Parameters	pH	pH/Temp	mV	Cond./Res./TDS/Sal./Temp.
Range	0~14.0 pH	pH:-1.00~15.00 pH Temp.:0~60° c	± 1999 mV	Cond.: (0~50.0) μ S/cm (50~500) μ S/cm (0.50~5.00) mS/cm (5.0~50.0) mS/cm Res.: 0~20.0 M Ω ·cm TDS : 0~35.0 g/L Sal.: 0~25.0 ppt Temp.: 0~50.0° c
Accuracy	± 0.1 pH	pH: ± 0.01 pH Temp.: ± 1.0 ° c	$\pm 0.2\%$ FS	Cond: $\pm 1.0\%$ FS Temp: ± 0.5 ° c
Auto.Temp. Compensation	0~60° c (NoTemp.display)	0~60° c	No	0~50° c
Calibration	1 point	1~3point	No	1 point
Calibration Solution	pH 7.00	pH 4.00 / 7.00 / 10.01	222mV ORP standard solution	1413 μ S/cm
Electrode Soaking Solution	Yes	Yes	Yes	No
IP Rating	IP57 Dustproof and Waterproof			
Power	2 x lithium batteries(CR2032) parallel connection			
Auto. Power-off	Automatically power-off after 10minutes			
Dimension & Weight	Meter: 148x29x14mm/Weight: 43g Portable Case: 168x96x28mm/Weight: 180g			

The most advanced conductivity measurement mode :

One point calibration, measurement range 0~50 mS/cm, accuracy: less than $\pm 1.5\%$ FS. Ability to switch among Conductivity, TDS, Salinity and Resistivity.

Portable/Bench type for lab.

SX700 Series of Water-proof Portable Meters

pH/mV/ORP/Cond./Res./TDS/Sal./DO/Temp.



Technical Parameters

Single parameter	SX711 Portable pH Meter
	SX712 Portable ORP Meter
	SX713 Portable Conductivity/TDS/Salinity/Resistivity Meter
Double parameter	SX716 Portable Dissolved Oxygen Meter
	SX721 Portable pH/ORP Meter
	SX723 Portable pH/Conductivity Meter
Multi-parameter	SX725 Portable pH/Dissolved Oxygen Meter
	SX726 Portable Conductivity/Dissolved Oxygen Meter
	SX731 Portable pH/ORP/Conductivity Meter
	SX736 Portable pH/Conductivity/Dissolved Oxygen Meter

Specifications

Model	SX711	SX712	SX713	SX716	SX721	SX723	SX725	SX726	SX731	SX736	SX751
Measurement Parameters	pH mV Temp.	ORP	Cond. TDS Sal. Res. Temp.	DO Temp.	pH ORP Temp.	pH mV Cond. TDS Sal. Res. Temp.	pH mV DO Temp.	Cond. TDS Sal. Res. DO Temp.	pH ORP Cond. TDS Sal. Res. Temp.	pH mV Cond. TDS Sal. Res. DO Temp.	pH ORP Cond. TDS Sal. Res. DO Temp.
pH											
Range	(-2.00~19.99) pH										
Accuracy	±0.01 pH										
Automatic Calibration	(1~3) point										
ATC	(0~100)° C										
mV(ORP)											
Range	±1999mV										
Accuracy	±0.1%FS										
Conductivity											
Range	Conductivity: (0.00~19.99) μS/cm (20.0~199.9) μS/cm (200~1999) μS/cm (2.00~19.99) mS/cm (20.0~199.9) mS/cm										
	TDS: (0~100) g/L										
	Sal.: (0~100) ppt										
	Res.: (0~100) MΩ·cm										
Accuracy	±1.0%FS										
Automatic Calibration	1 point										
ATC	(0~50)° C										
Dissolved Oxygen											
Range	(0~40.00) mg/L (ppm) (0~199.9)%										
Accuracy	±0.10%FS										
ATC	(0~45)° C										
Automatic Salinity Compensation	(0~45) ppt										
Manual Air Pressure Compensation	(66~200)kPa										



Special water-proof connector which four different electrodes (pH, ORP, Conductivity, DO) can be plugged into, ability of the meter to recognize automatically those electrodes.



IP57 water-proof, applied even under the difficult conditions.



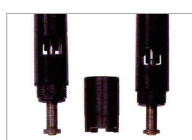
Mobile Laboratory - meter, electrode, standard solution and other accessories are all in a portabcase.



Advanced pH measurement mode
Automatic calibration, options of three series of pH buffer solution.
Ability to set two special pH measurement modes of high purity water and ammonia added purity water. 2503DT pure water pH electrode with a built-in temperature probe, applied in pH measurement of high purity water.



The most advanced conductivity measurement mode
Adopts one common two-ring conductivity electrode(k=1, built-in temperature probe), only one-point calibration, measurement range: 0.5 μS/cm~200mS/cm, accuracy: less than ±1.5% FS.
Automatic switches of range, automatic non-linear temperature compensation for high purity water.
DJS-0.1/T conductivity electrode (k=0.1, built-in temperature probe, with a flow tube assembly), applied for measurement of the high purity water less than 1 μS/cm.
Ability to switch among Conductivity, TDS, Salinity and Resistivity



Advanced Dissolved Oxygen measurement mode
DO 500 Dissolved Oxygen electrode can simultaneously measure DO, Conductivity and Temperature to realize automatic salinity compensation for DO measurement.
Polarogram type DO electrode with special electrode calibration sets, electrode polarization for only 3 to 5 minutes.

Other Parameters

Model	SX711	SX712	SX713	SX716	SX721	SX723	SX725	SX726	SX731	SX736	SX751
Data Storage	200 groups	100 groups	100 groups	100 groups	200 groups	300 groups	300 groups	200 groups	300 groups	400 groups	400 groups
Automatic Power-off	(0~20) minutes, 사용자가 set-up										
LCD Display	(42x33)mm, blue backlight										
Power	2xAAA batteries(1.5Vx2), 배터리수명: 100시간이하										
IP Rating	IP57 dustproof and waterproof										
Quality and Safety Certification	ISO9001:2000, CE and CMC										
Dimension & Weight	Meter (65 x 120 x 31)mm / 180g										
	Portable Case (255x210x50)mm / 790g	V	V	V	V						
	Portable Case (360x270x76)mm / 1.7kg					V	V	V	V	V	V

Meter Kits :

Model	SX711	SX712	SX713	SX716	SX721	SX723	SX725	SX726	SX731	SX736	SX751
201T-S Plastic pH Three-in-one Electrode	V				V	V	V		V	V	V
301Pt-S ORP Combination Electrode		V			V				V		V
2301-S Plastic Conductivity Electrode (ATC, K=1)			V			V		V	V	V	V
DO500 DO Electrode				V			V	V		V	V
pH Calibration Solution pH 4.00, 7.00, 10.01 / 50mL 1 Bottle Each	V				V	V	V		V	V	V
ORP Standard Solution (222mV/50mL)		V			V						
Conductivity Calibration Solution: 1413 μS/cm/50mL			V					V	V	V	V
Portable Case	V	V	V	V	V	V	V	V	V	V	V

Portable/Bench type for lab.

Lab. pH Meter and Conductivity Meter

Intelligent single chip design, automatic calibration, automatic or manual temperature compensation. Backlight display, simultaneous display of pH and temperature measurement. Electrode slope display after calibration.



Specifications

Model	PHS-3D
Range	pH: 0.00 to 14.00 pH mV: ± 1999 mV Temp: 0 to 100° C
Resolution	pH: 0.1/0.01 pH mV: ± 1 mV Temp: 0.1° C
Accuracy	pH: ± 0.01 pH mV: ± 0.1 % full scale Temp: ± 1 ° C
Temperature Compensation	0 to 100° C (manual or automatic)
Communication Connector	RS232 out-put
Storage & Record	25 groups, records the max. and min. value
Power	DC 9V/300 mA
Buffer Solution	pH 4.00/7.00/10.01
Dimension & Weight	160 x 190 x 70mm/ 750g

Catalog Number	Model	Description
3D-01	PHS-3D	pH meter + 201-C combination electrode + buffer solution + adapter
3D-02	PHS-3D	"pH meter + 201B-F pH/ATC trinal combination electrode + model 600 electrode holder + buffer solution + adapter"
3D-03	PHS-3D	"pH meter + 201B-F pH/ATC trinal combination electrode + model 601 stirring type electrode holder + ATC electrode + buffer solution + adapter + pH-link communication software"



DDS-11 C Lab. Conductivity Meter

Automatic calibration, ATC
Employing only one conductivity electrode(K=1) to measure the full scale. Ability to select range and switch units automatically.

Model	DDS-11C Lab. Conductivity Meter.
Range	0~2x10 ⁵ μ S/cm, divided into 4 ranges: 0~199.9 μ S, 200~1999 μ S, 2.00~19.99mS, 20.0~199.9mS
Accuracy	$\pm 1.0\%$ FS
Temperature Compensation	(0 ~50)° C (manual and automatic)
Data Storage	50 Groups
Power	DC9V/300mA
Dimension & Weight	160 x 190 x 70 mm / 750 g
Meter Kits	2301-F Plastic Conductivity Electrode (K=1, ATC), 1408 μ S/cm Conductivity Standard Solution (50ml), Model 600 Electrode Holder / 9V Power Adapter

Portable/Bench type for lab.

MP500 Series – Electrochemical Meters

pH / mV / ISE / Cond. /Res. / TDS / Sal. / DO / Temp.

MP500 series of electrochemical meters is the perfect combination of advance electronic, sensor technology and software design.

The series covers more than 10 kinds of electrochemistry measurement parameters and is classified into 14 kinds of electrochemical meters.

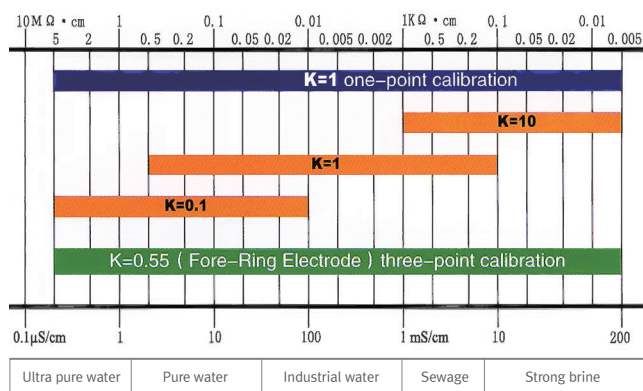
The series is the most cost-effective laboratory water analytical instruments.



Nice appearance, easy to use, equipped with a flexible electrode holder, an intelligent stirrer and a brief operation manual. Meets International GLP standards, with intelligent functions such as automatic calibration, automatic temperature compensation, data storage, time display, RS-232 out-put, function setup, self-diagnoses of information and etc. Options of three different measurement modes: a stable display mode, timing measurement mode and continuous measurement mode. Meter with a unique product serial number. Meter consistent with IP54 dust-proof and splash-proof.

Features of MP500 Series

pH and mV measurement	<ul style="list-style-type: none"> - Ability to set two special pH measurement modes for high purity water and ammonia added pure water to meet the requirement of electric power and petrochemical industry. - Ability to set "EH" oxidation-reduction potential (ORP) measurement mode to directly display ORP value as opposed to the standard hydrogen electrode potential.
Conductivity measurement	<ul style="list-style-type: none"> - Advanced and unique conductivity measurement technique, employing an two-ring conductivity electrode (K=1), only one-point calibration can reach the measurement precision within the scope of 200mS/cm. - Automatic selection of the measurement range, automatic non-linear temperature compensation for high-purity water of less than 10μS/cm.
Dissolved Oxygen measurement	<ul style="list-style-type: none"> - Automatic compensation of temperature, salinity and air pressure. - A new dissolved oxygen electrode with the function of salinity measurement can achieve automatic salinity compensation, short polarization time, fast response and accurate measurement.
ISE measurement	<ul style="list-style-type: none"> - Options of 10 kinds of common ions. Ability to input the molecular weight and ion valence to set other ions. - Ability to select or switch among four measurement units: pX, mol/L, mg/L and ppm.



Conductivity measurement range (0-200 mS/cm)

- Samsan conductivity meter needs only one ordinary two-ring conductivity electrode, one-point calibration.
- Other conductivity meters in Korean domestic market need three conductivity electrodes with different constants.
- Imported conductivity meters need a very expensive four-ring electrode, three-point calibration.



Ion Selection



DO Electrode, Calibration Set and Diaphragm Cap



Model 602 Flexible Electrode Holder



Model 901 Intelligent Stirrer (Ability to set the stirring rate. Options of AC and DC.)



Meets IP54 dust-proof and splash-proof

Portable/Bench type for lab.

MP500 Series – Single parameter Meters



MP511 Lab. pH Meter
Measurement Parameters :
pH, mV and temperature

Specifications

Range :
pH: -2.00 to 20.00 pH
rnv. ± 1999 mV
Temp: (-10 to 110) ° C

Accuracy :
pH: ± 0.01 pH
mV: $\pm 0.1\%$ full scale
Temp: ± 0.5 ° C

Other Parameters :
Automatic Temp. Compensation : (0 to 100) ° C
Data Storage : 600 groups
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight : (160x190x70) mm/880g

Meter Kits :
- SPH-200V-T-M plastic pH three-in-one electrode
- Model 602 flexible electrode holder
- RS-232 communication software

Features and Applications:
Economical benchtop pH meter
Equipped with three-in-one pH electrode,
fast response and easy to use
Suited for general laboratory application



MP512 Precision pH Meter
Measurement Parameters :
pH, mV and temperature

Specifications

Range :
pH: -2.000 to 19.999 pH
mV: ± 1999.9 mV
Temp.: (-10 to 110) ° C

Accuracy :
pH: ± 0.002 pH
mV: $\pm 0.03\%$ full scale
Temp.: ± 0.4 ° C

Other Parameters :
ATC(Automatic Temp. Compensation) : (0 to 100) ° C
Data Storage : 600 groups
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight: (160x190x70) mm/880g

Meter Kits :
- 201T-M plastic pH three-in-one electrode
- 2S03-C glass pH combination electrode
- MP500 temperature probe
- Model 602 flexible electrode holder
- RS-232 communication software

Features and Applications:
Benchtop pH meter with high precision
Equipped with model 2503 pH combination electrode, suited for measurement of the solution with the low ionic strength, feculent and colloidal solution
Able to set two special pH measurement modes for high purity water and ammonia added purity water, suited for applications in electric power and petrochemical industry



MP513 Lab. Conductivity Meter

Measurement Parameters :
Cond, resistivity, TDS, salinity
& temperature

Specifications

Range :
Cond :
0 to 200 mS/cm,
divided into five ranges
(0.00 to 20.00) μ S/cm;
(20.0 to 200.0) μ S/cm;
(200 to 2000) μ S/cm;
(2.00 to 20.00) mS/cm;
(20.0 to 200.0) mS/cm

Res : (0 to 100) M Ω · cm
TDS : (0 to 100) g/L
Sal : (0 to 100) ppt
Temp : (-10 to 110) ° C
Accuracy :
Cond, $\pm 1.0\%$ full scale
Temp: ± 0.5 ° C

Other Parameters :
Automatic Temp. Compensation : (0 to 50) ° C
Data Storage : 100 groups;
Comm. Connector: RS-232
Power: DC9V/300mA
Dimension & Weight: (160x190x70) mm/880g

Meter Kits :
- 2301-M plastic conductivity electrode (K=1, ATC)
- Model 602 flexible electrode holder
- RS-232 communication software

Features and Applications:
Economical benchtop conductivity meter.
Plastic conductivity electrode with ATC, easy to use.
Applied for conductivity measurement of general water solution.



MP515 Precision Conductivity Meter

Measurement Parameters :
Conductivity, resistivity, TDS,
salinity and temperature

Specifications

Range :
Cond. :
0 to 2000 mS/cm,
divided into five ranges
(0.00 to 20.00) μ S/cm;
(20.0 to 200.0) μ S/cm;
(200 to 2000) μ S/cm;
(2.00 to 20.00) mS/cm;
(20.0 to 200.0) mS/cm;
(200 to 2000) mS/cm (K=10)

Res : (0 to 100) M Ω · cm
TDS : (0 to 100) g/L
Sal : (0 to 100) ppt
Temp : (-10 to 110) ° C

Accuracy :
Cond. : $\pm 0.5\%$ full scale
Temp : ± 0.4 ° C

Other Parameters :
Automatic Temp. Compensation: (0 to 50) ° C
Data Storage : 600 groups
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight: (160x190x70) mm/880g

Meter Kits :
- 2401-M conductivity electrode (K=1, ATC)
- Model 602 flexible electrode holder
- RS-232 communicate software

Features and Applications:
Benchtop conductivity meter with high precision,
Ability to set two series of standard solution:
"KOREA" and "USA", automatic recognition of eight conductivity calibration solutions,
Ability to set three kinds of reference temperature: 18 ° C, 20 ° C and 25 ° C,
Built-in function of high purity water non-linear temperature compensation, suited for accurate conductivity measurement of high purity water.

Portable/Bench type for lab.

MP500 Series – Single parameter Meters



MP516 Dissolved Oxygen Meter

Measurement Parameters :
Dissolved oxygen and temperature

Specifications

Range :
DO: (0 to 40,00) mg/L(ppm);
(0 to 200.0) %
Temp: (0 to 45) ° C

Accuracy :
DO: ± 0.10 mg/L
Temp: ± 0.4 ° C

Other Parameters :
Automatic Temp. Compensation : (0 to 45) ° C
자동염분보상 : (0 to 45) ppt
자동에어압보상 : (80 to 105) kPa

Data Storage : 600 groups
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight: (160x190x70) mm/880g

Meter Kits :
– DO500 dissolved oxygen electrode
– Model 901 intelligent stirrer
– Model 602 flexible electrode holder
– RS-232 communication software

Features and Applications:
The most cost-effective oxygen meter. New dissolved oxygen electrode with the function of salinity measurement can achieve automatically salinity and temperature compensation, Built-in air pressure sensor can achieve automatically air pressure compensation. Polarographic type dissolved oxygen electrode, short polarization time, fast response and accurate measurement. Convenient dissolved oxygen electrode calibration sets and combined diaphragm cap



MP517 Sodium Ion Concentration Meter

Measurement Parameters :
Na+ concentration, mV and temperature

Specifications

Range :
Na+ : (0,00 to 9,00) pNa
Units : pNa, mol/L, mg/L and ppm
mV : ± 1999.9 mV
Temp : (-10 to 110) ° C

Accuracy :
Na+ : ± 0.01 pNa
mV : $\pm 0.1\%$ full scale
Temp : ± 0.5 ° C

Other Parameters :
Automatic Temp. Compensation : (0 to 50) ° C

Data Storage : 600 groups;
Comm. Connector : RS-232
Power : DC9V/300mA

Dimension & Weight: (160x190x70) mm/880g

Meter Kits :
– Model 7801 sodium ion electrode
– Model 6212-M reference electrode
– MP500 temperature probe
– Model 901 intelligent stirrer
– Model 602 flexible electrode holder
– RS-232 communication software

Features and Applications:
Two-point sodium ion concentration standard solution calibration, directly testing sodium ion concentration of samples. The convenient and reliable intelligent stirrer of which the fixed stirring rate can be set. lower limit of measuring value: static test less than 2ppb and dynamic test less than 0.2ppb, applied for sampling measurement of sodium ion concentration of high purity water in electric power plants.



MP518 Calcium Ion Concentration Meter

Measurement Parameters :
Ca2+, mV and temperature

Specifications

Range :
Ca2+ : (0.00 to 9.00) pCa
Units : pCa, mol/L, mg/L and ppm
mV : ± 1999.9 mV
Temp : (-10 to 110) ° C

Accuracy :
Ca2+ : ± 0.01 pCa
mV : $\pm 0.1\%$ full scale
Temp : ± 0.5 ° C

Other Parameters :
Automatic Temp. Compensation : (0 to 50) ° C

Data Storage : 600 groups;
Comm. Connector : RS-232;
Power : DC9V/300mA;
Dimension & Weight: (160x190x70) mm/880g

Meter Kits :
– Model CA501 calcium ion combination electrode
– MP500 temperature probe
– Model 901 intelligent stirrer
– Model 602 flexible electrode holder
– RS-232 communication software

Features and Applications:
Apply with combination calcium electrode, reliable and easy to use. Two-point calcium ion concentration standard solution calibration, directly testing calcium ion concentration of samples. The convenient and reliable intelligent stirrer of which the fixed stirring rate can be set. Sampling measurement of the calcium ion concentration in water solution.



MP519 Fluoride Ion Concentration Meter

Measurement Parameters :
F-, mV and temperature

Specifications

Range :
F- : (0.00 to 9.00) pF
Units : pF, mol/L, mg/L and ppm
mV : ± 1999.9 mV
Temp : (-10 to 110) ° C

Accuracy :
F- : ± 0.01 pF
mV : $\pm 0.1\%$ full scale
Temp : ± 0.5 ° C

Other Parameters :
Automatic Temp. Compensation : (0 to 50) ° C

Data Storage: 600 groups;
Comm. Connector: RS-232
Power: DC9V/300mA
Dimension & Weight: (160x 190x70) mm/880g

Meter Kits :
– Model F502 fluoride ion electrode
– Model 6211-M reference electrode
– MP500 temperature probe
– Model 901 intelligent stirrer
– Model 602 flexible electrode holder
– RS-232 communication software

Features and Applications:
Two-point fluoride ion concentration standard solution calibration, directly testing fluoride ion concentration of samples. The convenient and reliable intelligent stirrer of which the fixed stirring rate can be set. Sampling measurement of the fluoride ion concentration in water solution.

Portable/Bench type for lab.

MP500 Series – Double parameter Meters



MP521 Lab pH/Conductivity Meter

Measurement Parameters :
pH, mV, conductivity, resistivity,
TDS, salinity and temperature

Specifications

Range :
pH: -2.00 to 20.00 pH
mV: ± 1999 mV

Cond :
0 to 2000 mS/cm, divided into five
ranges
(0.00 to 20.00) μ S/cm:
(20.0 to 200.0) μ S/cm:
(200 to 2000) μ S/cm:
(2.00 to 20.00) mS/cm:
(20.0 to 200.0) mS/cm
Res: (0 to 100) M Ω ·cm:
TDS: (0 to 100) g/L
Sal: (0 to 100) ppt
Temp: (-10 to 110) °C

Accuracy :
pH: ± 0.01 pH:
mV: $\pm 0.1\%$ full scale
Cond: $\pm 1.0\%$ full scale
Temp: ± 0.5 °C

Automatic Temp. Compensation :
pH: (0 to 100) °C:
Cond: (0 to 50) °C

Other Parameters :
Data Storage : 900 groups ;
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight : (160x 190x70)
mm/880g

Meter Kits :
- SPH-200V-T-M plastic pH three-
in-one electrode
- 2301-M plastic conductivity
electrode (K=1, ATC)
- Model 602 flexible electrode holder
- RS-232 communication software

Features and Applications:
The most useful pH and conductivity
double-parameter meter.
The cost-effective and economical
benchtop
meter meets GLP standards.
The ideal product for any general
laboratory
application.



MP522 정밀 pH/Conductivity Meter

Measurement Parameters :
pH, mV, conductivity, resistivity,
TDS, salinity and temperature

Specifications

Range :
pH: -2.000 to 19.999 pH
mV: ± 1999.9 mV

Cond :
0 to 2000 mS/cm, divided into six
ranges
(0.00 to 20.00) μ S/cm:
(20.0 to 200.0) μ S/cm:
(200 to 2000) μ S/cm:
(2.00 to 20.00) mS/cm:
(20.0 to 200.0) mS/cm:
(200 to 2000) mS/cm (K=10)
Res: (0 to 100) M Ω ·cm:
TDS: (0 to 100) g/L
Sal: (0 to 100) ppt
Temp: (-10 to 110) °C

Accuracy :
pH: ± 0.002 pH:
mV: $\pm 0.03\%$ full scale
Cond: $\pm 0.5\%$ full scale
Temp: ± 0.4 °C

Automatic Temp. Compensation :
pH: (0 to 100) °C
Cond: (0 to 50) °C

Other Parameters :
Data Storage : 900 groups;
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight : (160x190x70)
mm/880g

Meter Kits :
- SPH-200V-T-M plastic pH three-
in-one electrode
- SPH-100G-C glass pH combination
electrode- 2401-M glass
conductivity electrode (K=1, ATC)
- MP500 temperature probe
- Model 602 flexible electrode holder
- RS-232 communication software

Features and Applications:
pH and conductivity double-
parameter meter with high precision.
Equipped with model 2503 pH
electrode, suited for measurement
of the solution with the low ionic
strength, feculent and colloidal
solution.
Able to set two special pH
measurement modes for high purity
water and ammonia added purity
water.
Suited for conductivity measurement
of high purity water with non-linear
automatic temperature compensation.



MP523 pH/Ion Concentration Meter

Measurement Parameters :
pH, mV, ion concentration 및
temperature

Specifications

Range :
pH: -2.000 to 19.999 pH
mV: ± 1999.9 mV
Ion: 0.00 to 14.00 pX
(units: pX, mol/L, mg/L and ppm)
Temp: (-10 to 110) °C

Accuracy :
pH: ± 0.002 pH
mV: $\pm 0.03\%$ full scale
Ion: $\pm 0.5\%$ of reading value
(monovalent)
 $\pm 1.0\%$ of reading value
(bivalent)
Temp: ± 0.4 °C

Automatic Temp. Compensation :
pH: (0 to 100) °C
Ion: (0 to 60) °C

Other Parameters :
Data Storage : 900 groups
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight : (160x190x70)
mm/880g

Meter Kits :
- SPH-200V-T-M plastic pH three-
in-one electrode
- SPH-100G-C glass pH combination
electrode
- MP500 temperature probe
- 6213 double-junction reference
electrode
- Model 602 flexible electrode holder
- Model 901 intelligent stirrer
- RS-232 communication software

Features and Applications:
pH and ion concentration double-
parameter meter with high precision.
Equipped with model 2503 pH
electrode, suited for measurement
of the solution with the low ionic
strength, feculent and colloidal
solution.
Able to set two special pH
measurement modes for high purity
water and ammonia added purity
water, suited for applications in
electric power and petrochemical
industry.
Options of ten kinds of ions, ability to
self-define other ions. Ability to switch
among four measurement units
of ion concentration: pX, mol/L, mg/L
and ppm. Ability to self-set two kinds
of calibration solution to directly test
the ion concentration of samples.



MP526 Conductivity/ Dissolved Oxygen Meter

Measurement Parameters :
Conductivity, resistivity, TDS,
salinity, dissolved oxygen and
temperature

Specifications

Range :
Cond.:
0 to 2000 mS/cm,
(0.00 to 20.00) μ S/cm;
(20.0 to 200.0) μ S/cm;
(200 to 2000) μ S/cm:
(2.00 to 20.00) mS/cm.
(20.0 to 200.0) ms/cm,
(200 to 2000) mS/cm (K=10)
Res.: (0 to 100) M Ω ·cm:
TDS: (0 to 100) g/L
Sal: (0 to 100) ppt
DO: (0 to 40.00) mg/L(ppm):
(0 to 200.0) %
Temp: (-10 to 110) °C

Accuracy :
Cond.: $\pm 0.5\%$ full scale
DO: ± 0.10 mg/L
Temp: ± 0.4 °C

Automatic Temp. Compensation :
Cond.: (0 to 50) °C
DO: (0 to 45) °C

Other Parameters :
Data Storage : 600 groups
Comm. Connector : RS-232
Power : DC9V/300mA
Dimension & Weight : (160x190x70)
mm/880g

Meter Kits :
- 2401-M glass conductivity
electrode (K=1, ATC)
- DO500 dissolved oxygen electrode
- Model 602 flexible electrode holder
- Model 901 intelligent stirrer
- RS-232 communication software

Features and Applications:
Conductivity and dissolved oxygen
double-parameter meter with high
precision.
Built-in function of high purity water
non-linear automatic temperature
compensation, suited for accurate
conductivity measurement of high
purity water.
New dissolved oxygen electrode with
the function of salinity measurement
can automatically achieve salinity and
temperature compensation.
Built-in air pressure sensor can
automatically achieve air pressure
compensation.
Polarographic type dissolved oxygen
electrode, short polarization time, fast
response and accurate measurement.

Portable/Bench type for lab.

MP500 Series – Multi parameter and Double parameter Meters



MP525 pH/Dissolved Oxygen Meter

Measurement Parameters :
pH, mV, dissolved oxygen and temperature

Specifications

Range :

pH: -2.000 to 19.999 pH

mV: ± 1999.9 mV

DO: (0 to 40.00) mg/L(ppm): (0 to 200.0) %

Temp: (-10 to 110) ° C

Accuracy :

pH: ± 0.002 pH

mV: $\pm 0.03\%$ full scale

DO: ± 0.10 mg/L

Temp: ± 0.4 ° C

Automatic Temp. Compensation :

pH: (0 to 100) ° C

DO: (0 to 45) ° C

Other Parameters :

Data Storage: 900 groups

Comm. Connector: RS-232

Power: DC9V/300mA

Dimension & Weight: (160x190x70) mm/880g

Meter Kits :

- SPH-200V-T-M plastic pH three-in-one electrode
- SPH-100G-C glass pH combination electrode
- DO500 dissolved oxygen electrode
- MP500 temperature probe
- Model 602 flexible electrode holder
- Model 901 intelligent stirrer
- RS-232 communication software

Features and Applications:

pH and dissolved oxygen double-parameter meter with high precision. Equipped with model 2503 pH electrode, suited for measurement of the solution with the low ionic strength, feculent and colloidal solution.

Able to set two special pH measurement modes for high purity water and ammonia added purity water, suited for applications in electric power and petrochemical industry.

New dissolved oxygen electrode with the function of salinity measurement can automatically achieve salinity and temperature compensation. Built-in air pressure sensor can automatically achieve air pressure compensation.

Polarographic type dissolved oxygen electrode, short polarization time, fast response and accurate measurement.



MP551 pH/mV/ Ion Concentration / Conductivity / Dissolved Oxygen Meter

Measurement Parameters :
pH, mV, ion concentration, conductivity, resistivity, TDS, salinity, dissolved oxygen and temperature

Specifications

Range :

pH: -2.000 to 19.999 pH;

mV: ± 1999.9 mV

Ion: 0.00 to 14.00 pX

(units: pX, mol/L, mg/L and ppm)

Cond.:

0 to 2000 mS/cm, Divided into six ranges

(0.00 to 20.00) μ S/cm; (20.0 to 200.0) μ S/cm;

(200 to 2000) μ S/cm; (2.00 to 20.00) mS/cm;

(20.0 to 200.0) mS/cm; (200 to 2000) mS/cm (K=10)

Res: (0 to 100) M Ω ·cm;

TDS: (0 to 100) g/L

Sal: (0 to 100) ppt

DO: (0 to 40.00) mg/L(ppm); (0 to 200.0) %

Temp: (-10 to 110) ° C

Accuracy :

pH : ± 0.002 pH; mV: $\pm 0.03\%$ full scale

Ion : $\pm 0.5\%$ of reading value (monovalent)

$\pm 1.0\%$ of reading value (bivalent)

Cond.: $\pm 0.5\%$ full scale;

DO: ± 0.10 mg/L;

Temp : ± 0.4 ° C

Automatic Temp. Compensation :

pH: (0 to 100) ° C; Ion: (0 to 60) ° C;

Cond.: (0 to 50) ° C; DO: (0 to 45) ° C

Other Parameters:

Data Storage: 300 groups

Communication Connector: RS-232

Power: DC9V/300mA

Dimension & Weight: (160x190x70) mm/880g

Meter Kits :

- SPH-200V-T-M plastic pH three-in-one electrode
- SPH-100G-C glass pH combination electrode
- 2401-M glass conductivity electrode (K=1, ATC)
- DO500 DO electrode
- Model 6213 double-junction reference electrode
- MP500 temperature probe
- Model 602 flexible electrode holder
- Model 901 intelligent stirrer
- RS-232 communication software

Features and Applications:

Multi-parameter meter with high accuracy covers more than ten measurement parameters. Equipped with model 2503 pH electrode, suited for measurement of the solution with the low ionic strength and colloidal solution. Able to set two special pH measurement modes for high purity water and ammonia added purity water.

High purity water non-linear automatic temperature compensation for conductivity measurement, suited for measurement of high purity water. Ability to switch among four measurement units of ion concentration: pX, mol/L, mg/L and ppm.

DO measurement mode with automatic compensation for temperature, salinity and air pressure.

Portable/Bench type for lab.

Water hardness Meter

The basic concept of water hardness

Water hardness is the concentration of calcium ion (Ca²⁺) and magnesium ion (Mg²⁺). It is an important indicator of water quality. Hazards of hard water:

- (1) When hard water scales the boiler, it will waste heat energy and even cause an explosion.
- (2) Hard water can not be used in the process of many industries such as pharmaceutical, electronics, paper, printing, chemical, printing & dyeing, food, beverage industry and etc.
- (3) Hard water is extremely harmful to human life and health



Model YD300
Portable Water Hardness Meter



Model YD200 L
laboratory Water Hardness Meter

Units of water hardness

mmol/L –the basic units of water hardness	mmol/L (Boiler)–the special units of the water hardness of industrial boiler
mg/L (CaCO ₃) –CaCO ₃ mass concentration indicates water hardness	° fH – France
mg/L(CaO) –CaO mass concentration indicates water hardness	° dH – German
mg/L(Ca) –Ca mass concentration indicates water hardness	° EH – England

Shortcomings of two conventional testing methods

EDTA volumetric method	(1) Inconvenient preparation of reagents, complicated operation and uncertain final result. (2) Lower limit of testing less than 5 mg/L(CaCO ₃)”
Colorimeter method	(1) Sub-range test, preparation of three reagents of low, medium and high hardness required. (2) Lower limit of testing less than 50 mg/L(CaCO ₃), low accuracy (3) Complicated operation, a cuvette, a pipette and detergent required.

Features of electrode method

- Employs model 601-F water hardness combination electrode which consists of measurement electrode, reference electrode and temperature probe. Equal selectivity for the calcium and magnesium ions in water samples. New structure, stable electrode potential, quick response and easy to use.
- The electronic unit adopts intelligent chip design, with automatic calibration, automatic temperature compensation, automatic swithes of range, data storage and etc.
- Easy to operate, measurement range 0–10 mmol/L.
- Ability to switch among eight units: mmol/L, mg/L (CaCO₃), mg/L (CaO), mmol/L (Boiler), mg/L (Ca), ° fH, ° dH and ° EH.
- Equipped with B1, B2 and B3 calibration solutions.
- RS232 out-put in Mode YD200 Laboratory Water Hardness Meter, matching the computer.
- Waterproof design of Model YD300 Portable Water Hardness Meter (Waterproof IP57), equipped with a portable case.

Specifications

Mode	Model YD200 Lab. Water Hardness Meter	Model YD300 Portable Water Hardness Meter
Range	0–10 mmol/L or 0–1000 mg/L (CaCO ₃)	
Resolution	0.01 and 0.1 water hardness units	
Accuracy	± 5% full scale	
Units	mmol/L, mg/L(CaCO ₃), mg/L(CaO), mmol/L(Boiler), mg/L(Ca), ° fH, ° dH and ° EH	
Temperature compensation	5 to 50° C (automatic or manual)	5 to 50° C (automatic)
Communication Connector	RS–232 out–put, equipped with communication software and cable	None
Electrode	Mode 601–F water hardness combination electrode	Mode 601–S water hardness combination electrode
Calibration Solution	B1, B2 and B3 one bottle each (250mL)	B1, B2 and B3 one bottle each (100mL)
Electrode Holder	Model 601 stirring type electrode holder	None
Data Storage	128 groups	99 groups
Power	DC9V power adaptor	2 x AA batteries (1.5V x 2)
Dimension and weight	160 x 190 x 70mm / 750g	Portable Case : 255 x 210 x 50mm / 790g

Portable/Bench type for lab.

Turbidity Meter



SX5200 Lab Turbidity Meter



SX7200 Portable Turbidity Meter

Features

- Adopts electrode method, easy to use, no need sampling, directly measuring the turbidity of samples.
- Employs turbidity electrode with the special structure based on the IR 90° scattered light measuring principle.
- Intelligent chip design, automatic calibration, automatic setup to zero and automatic switches of measurement range.
- Meets turbidity sample testing requirement of EPA180.1 and ISO7027.
- Meets turbidity testing criteria of American Society of Brewing Chemists(ASBC) and European Brewery Convention (EBC).
- Options of the units such as NTU, FTU, ASBC, EBC and etc.

Specifications

Model	SX5200 Lab Turbidity Meter	SX7200 Portable Turbidity Meter
Range	(0-4000) NTU	(0-2000) NTU
Resolution	0.01/0.1/1 NTU	0.01/0.1/1 NTU
Accuracy	(0-500) NTU: ±2% of reading value +0.01 NTU (500-1000) NTU: ±3% of reading value (1000-4000) NTU: ±5% of reading value	(0-500) NTU: ±2% of reading value +0.01NTU (500-1000) NTU: ±3% of reading value (1000-1999) NTU: ±5% of reading value
Data storage	999 groups, Display time and date	200 groups, Display time and date
Electrode	ZD700-S Turbidity Electrode	
Communication Connector	RS232, equipped with software CD-ROM box cables	None
Power	DC9V Power adapter	2xAA Batteries (1.5Vx2)
IP Rating	IP54 Water-proof and splash-proof	IP57 Water-proof
Other Accessories	Model 602 Flexible electrode holder	Portable Case
Dimension & Weight	(160x190x70)mm / 880g	Portable Case (255x210x50)mm / 790g

Applications

Applied in bottled water, tap water, sewage, rivers, lakes, beer brewing, food, pharmacy, cosmetics, textile, photographic material, semiconductor, petrochemistry, electric power, micro-organism research and etc.

Portable/Bench type for lab.

Acid-Alkali Concentration Meter



SX5150 Lab Acid-Alkali Meter



SX7110 Portable Acid Meter / SX7120 Portable Alkali Meter / SX7150 Portable Acid-Alkali Meter

Features

- Unique electrode method to measure acid and alkali concentration.
- Acid-Alkali electrode with the structure patented, corrosion-resistant and easy-to-clean.
- Intelligent chip design, advanced measuring technique, easy to use.
- Wide measurement range, only one electrode needed to test the full scale.
- Extensive applications, ability to measure common acid and alkali concentration.
- Options of the units such as %, mol/L, g/cm³, and g/L.

Meters

Model	Measuring Objects
SX7110 Portable Acid Meter	Acid solution: H ₂ SO ₄ , HCL and HN ₃
SX7120 Portable Alkali Meter	Alkali solution: NaOH, Na ₂ CO ₃ , KOH and NH ₄ OH
SX7150 Portable Acid-Alkali Meter	Acid solution: H ₂ SO ₄ , HCL and HN ₃ Alkali solution: NaOH, Na ₂ CO ₃ , KOH and NH ₄ OH
SX5150 Lab. Acid-Alkali Meter	

Specifications

Model	SX5150 Lab Acid-Alkali Meter	SX7110 Portable Acid Meter	SX7120 Portable AlkaliMeter	SX7150 Portable Acid-AlkaliMeter
Range	0~15.00%			
Resolution	0.01%			
Accuracy	±2% of reading value or ±0.2% (whichever is greater)			
Electrode	ND800-S Acid-Alkali concentration electrode			
Data Storage	999 groups	200 groups	200 groups	300 groups
Communication Connector	RS232 communication software	None		
Power	DC9V power adapter	2xAA Batteries (1.5Vx2)		
IP Rating	IP54 dust-proof and splash-proof	IP57 Water-proof		
Meter Kits	Model 602 flexible electrode holder	Portable Case		
Dimension & Weight	160x190x70mm / 880g	255x210x50mm / 790g		

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Sensors

pH SENSORS / SPH-100G



ITEM	pH electrode
MODEL	SPH-100G
Type	Filling
Measuring Range	0~14.00pH
Conductivity of liquid	over than 100 μ S/cm
Temperature	5~60°C
Pressure	Using HOLDER filled with KCL It's filled by atmospheric pressure
Reference Electrode	Ag/AgCl
Junction	sleeve
Zero Potential	7.00pH \pm 0.01pH
Materials	glass
Dimensions	\varnothing 12 X 155mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Connector	Y-Terminal type

pH SENSORS / SPH-200T



ITEM	pH electrode
MODEL	SPH-200T
Type	Non-Filling
Measuring Range	0~14.00pH
Conductivity of liquid	over than 200 μ S/cm
Temperature	0~90°C
Pressure	less than MAX 1 kg/cm ²
Reference Electrode	Ag/AgCl
Junction	sleeve
Zero Potential	7.00pH \pm 0.01pH
Materials	Glass
Dimensions	\varnothing 12 X 155mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Temperature Compensation	Available

pH SENSORS / SPH-100T



ITEM	pH electrode
MODEL	SPH-100T
Type	Filling
Measuring Range	0~14.00pH
Conductivity of liquid	over than 100 μ S/cm
Temperature	5~60°C
Pressure	Using HOLDER filled with KCL It's filled by atmospheric pressure
Reference Electrode	Ag/AgCl
Junction	sleeve
Zero Potential	7.00pH \pm 0.01pH
Materials	glass
Dimensions	\varnothing 12 X 155mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Temperature Compensation	Available

ORP SENSORS / SOR-300G



ITEM	ORP electrode
MODEL	SOR-300G
Type	Filling
Measuring Range	\pm 1500mV
Conductivity of liquid	over than 100 μ S/cm
Temperature	0~60°C
Pressure	Using HOLDER filled with KCL It's filled by atmospheric pressure
Reference Electrode	Ag/AgCl
Junction	sleeve
Zero Potential	0mV \pm 1mV
Materials	Glass
Dimensions	\varnothing 12 X 155mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Connector	Y-Terminal Type

pH SENSORS / SPH-200G



ITEM	pH electrode
MODEL	SPH-200G
Type	Non-Filling
Measuring Range	0~14.00pH
Conductivity of liquid	over than 200 μ S/cm
Temperature	0~90°C
Pressure	less than MAX 1 kg/cm ²
Reference Electrode	Ag/AgCl
Junction	sleeve
Zero Potential	7.00pH \pm 0.01pH
Materials	Glass
Dimensions	\varnothing 12 X 155mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Connector	Y-Terminal Type

ORP SENSORS / SOR-400G



ITEM	ORP electrode
MODEL	SOR-400G
Type	Non-Filling
Measuring Range	\pm 1500mV
Conductivity of liquid	over than 200 μ S/cm
Temperature	0~90°C
Pressure	less than MAX 1 kg/cm ²
Reference Electrode	Ag/AgCl
Junction	sleeve
Zero Potential	0mV \pm 1mV
Materials	glass
Dimensions	\varnothing 12 X 155mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Connector	Y-Terminal Type

pH SENSORS / SPH-200V



ITEM	pH electrode
MODEL	SPH-200V
Type	Non-Filling
Measuring Range	0~14.00pH
Conductivity of liquid	over than 200 μ S/cm
Temperature	0~80°C
Pressure	less than MAX 0.5 kg/cm ²
Reference Electrode	Ag/AgCl
Junction	Ceramic
Zero Potential	7.00pH \pm 0.02pH
Materials	PC Housing
Dimensions	\varnothing 12 X 160mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Connector	Y-Terminal Type

ORP SENSORS / SOR-400V



ITEM	ORP electrode
MODEL	SOR-400V
Type	Non-Filling
Measuring Range	\pm 1500mV
Conductivity of liquid	over than 200 μ S/cm
Temperature	0~80°C
Pressure	less than MAX 0.5 kg/cm ²
Reference Electrode	Ag/AgCl
Junction	Ceramic
Zero Potential	0mV \pm 2mV
Materials	PC Housing
Dimensions	\varnothing 12 X 160mm
Cable Length	5M(Standard)
Connector	Y-Terminal Type
Connector	Y-Terminal Type

Sensors

For Dissolved Oxygen / For Residual Chlorine / For Conductivity

For Dissolved Oxygen - Accessories

PROBE



SP-20

1. Type: Submersible or flow-through type
2. Measuring Liquid Temp: 0~40°C
3. Liquid-end materials: PVC

CHIP



Specifications

MODEL	CHIP for CRN-96 DO
Type	Cartridge change & Disposal Type
Response	90% response within 60 seconds
Measuring Liquid	Temp: 0~40°C Pressure: 0~1.0kg/cm ² (0~0.1MPa) Possible to measure in the depth of water 10m Flow speed: Over than 25 cm/sec
Membrane	Liquid-end materials: PTFE, Thickness: 25μm
Probe	SP-20

For Residual Chlorine - Accessories

HOLDER



SRH-10

1. Flow Rate: 0.5~1.0L/min
2. Pressure: Inside (Less than 3Kgf/cm²)
Outside (Atmosphere)
3. Materials: Acryl
4. Attachable with pH sensor (SPH-200V) and ORP sensor (SOR-400V)

SENSOR

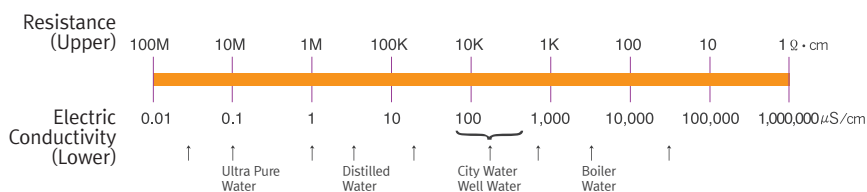


SCR-600

1. No reagent type by galvanic method
2. Measuring of extricated residual chlorine
3. Conditions of measuring liquid
 - Temperature: 0~40°C
 - Flow: 0.5~1.0L/min
 - pH: 6~8pH
4. Liquid-end materials: PVC
5. Sensor's materials
 - Anode: Pt
 - Cathode: Ag-AgCl
6. Lead cable: 5m
(Possible to extend by 30m with our exclusive cable and connect box)

For Conductivity - Accessories

ELECTRIC CONDUCTIVITY PRINCIPLE



SENSORS 4 ELECTRODE



SE-30/P4

1. Measuring liquid temperature: 0~50°C
2. Liquid-end materials: Case (PVC) Electrode (SUS 316)
3. Flow-through type or screw type
4. Lead cable: 5m (Standard)

SENSORS 2 ELECTRODE



SE-30/P2

1. Measuring liquid temperature: 0~50°C
2. Liquid-end materials: Case (PVC) Electrode (SUS 316)
3. Screw type (PT3/4)
4. Lead cable: 5m (Standard)

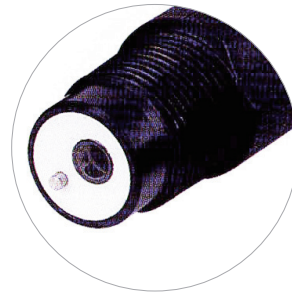
Other Sensors

Double Junction pH (ORP) Combination Electrode

Model SPH-250/250T (SOR-450)



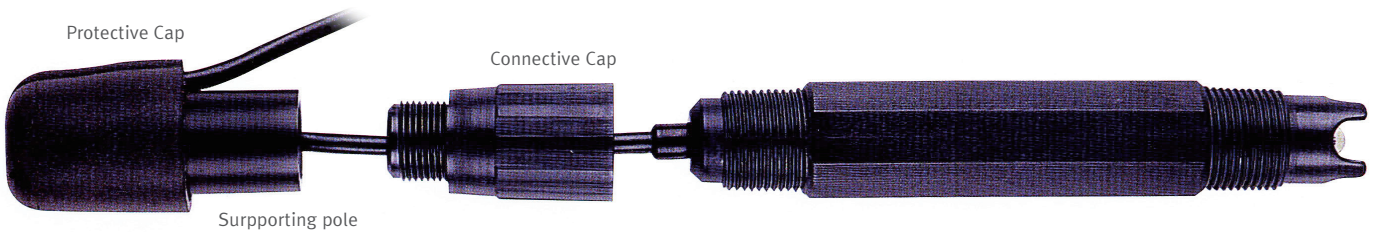
Model SPH-250/250T
pH Electrode



Model SPH-250P(T)
pH Electrode



Model SOR-450
Electrode



Structure Characteristics

- The combination of four electrode measurement system (measuring electrode, reference electrode, grounded electrode and temperature sensor).
- Cricoid polytetrafluoroethylene junction, double junction reference electrode, extending the electrode life effectively.
- PPS(polybenzenthioether) housing, able to withstand high temperature,corrosion-resistant.
- Gelatinous electrolyte, No need to refill KCL solution.

Specifications

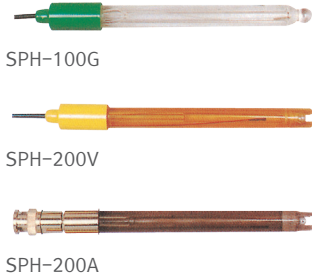
Model	SPH-250(T) pH Electrode	SPH-250P(T) pH Electrode	SOR-450 ORP Electrode
Range	0 to 14 pH	2 to 12 pH	1500mV(platinum ring)
Structure	Cricoid polytetrafluoroethylene junction, double junction reference electrode, gelatinous electrolyte		
Material	PPS(polybenzenthioether) housing		
Thread	3/4" NPT		
Grounded electrode	Equipped as required		
Temperature sensor	Pt100, Pt1000 or thermister equipped as required		None
Working temperature	0 to 80° C	0 to 60° C	0 to 80° C
Cable	5-20m low noise screening cable, pipe-in type.		

Model	Range	Working Temperature	Bubble pH	Plane pH	Temperature Electrode	Grounded Electrode	Cable	Dimension	
SPH-250	0 to 14pH	0 to 80° C	v				5m 10m 15m 20m	ø 29 x 166mm	
SPH-250T			v		v				
SPH-250E			v			v			
SPH-250ET			v		v	v			
SPH-250P	2 to 12pH	0 to 60° C		v				ø 29 x 156mm	
SPH-250PT				v	v				
SPH-250PE				v		v			
SPH-250PET				v	v	v			
SOR-450	± 1500mV	0 to 80° C					ø 29 x 166mm		
SOR-450E						v			

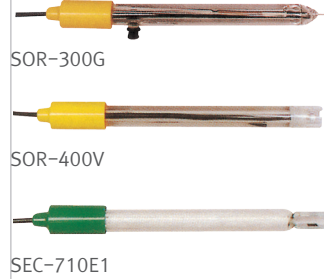
Other Sensors

Combination Electrodes

pH SERIES



ORP SERIES



FLAT TYPE PH COMBINATION ELECTRODE

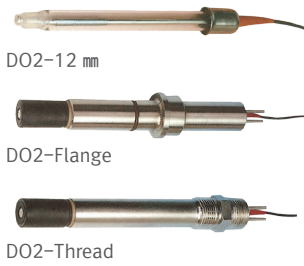


HT-200 SERIES

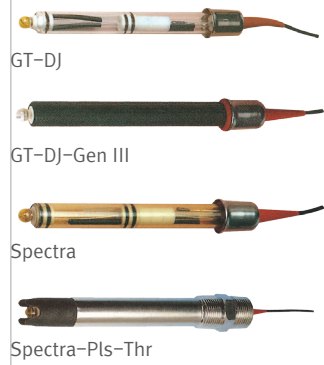


Biotech Sensors

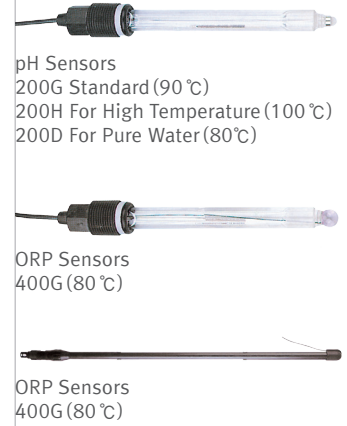
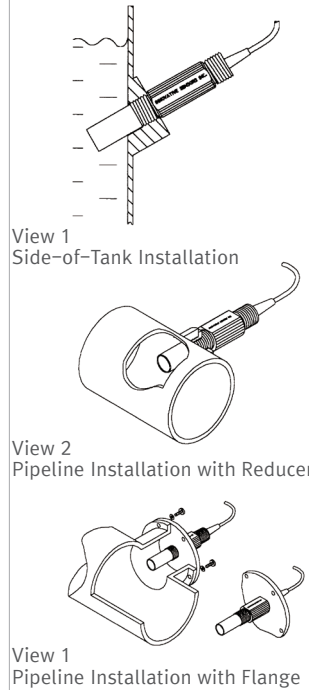
DO SENSORS



pH SENSORS



INSTALLATION GUIDE



Specifications

	pH Range	Temperature Range	Pressure Range(psig)	Reference Cell	Wetted Materials	Cable & Connector
GT-DJ	0~14pH	-5 °C ~ +135 °C	500psig* @25 °C	Double Junction KNO ₃ & KCl / AgCl	Teflon®, Glass membrane, Glass outer body, EPR	10' BNC
GT-DJ-GEN III	0~14pH	-5 °C ~ +135 °C	500psig* @25 °C	Triple Junction 3MKNO ₃ & KCl / AgCl	Teflon®, Glass membrane, PPS(Ryton®), EPR	10' BNC
Spectra	0~14pH	-5 °C ~ +135 °C	500psig* @25 °C	Double Junction 3MKNO ₃ & KCl / AgCl	Teflon®, Glass membrane, Polymer outer body, EPR	10' BNC
Spectra-plus-Thread	0~14pH	-5 °C ~ +135 °C	100psig* @25 °C	Double Junction KNO ₃ & KCl / AgCl	Semi-Crystalline Resin, 316 Stainless Steel, Teflon®, Glass, EPR	20' BNC
Spectra-plus-Flange	0~14pH	-5 °C ~ +135 °C	100psig* @25 °C	Double Junction KNO ₃ & KCl / AgCl	Semi-Crystalline Resin, 316 Stainless Steel, Teflon®, Glass, EPR	20' BNC
LG-TJ	0~14pH	-5 °C ~ +135 °C	100psig* @25 °C	Triple Junction 3MKCl + KCl / AgCl	Teflon®, Glass membrane, Glass outer body, EPR	10' BNC
Pressurizable	0~14pH	-5 °C ~ +135 °C	100psig* @25 °C	Single Junction KCl / AgCl	Ceramic, Glass membrane, Glass outer body	5' BNC
Spectra-T	0~14pH	-5 °C ~ +135 °C	150psig* @25 °C	Double Junction KNO ₃ & KCl / AgCl	Teflon®, Glass membrane, PPS(Ryton®), EPR	10' BNC

	Operating Range	Temperature Range	Pressure Range(psig)	Output	Wetted Materials	Cable & Connector
DO ₂ -12 mm	0~40% Oxygen	-5 °C ~ +135 °C	0~50psig	15µA in air @25 °C	Teflon®, Glass, Silicone	10' BNC
DO ₂ -FLANGE	0~40% Oxygen	-5 °C ~ +135 °C	0~50psig	15µA in air @25 °C	Teflon®, Viton®, Semi-Crystalline Resin, 316 Stainless Steel	20' BNC
DO ₂ -THREAD	0~40% Oxygen	-5 °C ~ +135 °C	0~50psig	15µA in air @25 °C	Teflon®, Viton®, Semi-Crystalline Resin, 316 Stainless Steel	20' BNC

Ultrasonic Cleaner

Applications

1. In chemical plant process line
2. In food process line
3. In neutralizing installation of waste water treatment
4. In drinking water and sewage treatment
5. In plating treatment installation
6. In other water controls

Features

1. **Water-Proof and Dust-Proof** –
Applicable for severe conditions as solid structure designed with die casting
2. **High power cleaning** –
Continuous cleaning with 75KHz ultrasonic oscillator
3. **Easy assembly and disassembly** –
Easy maintenance and sensor calibration due to easy assembly and disassembly
4. **Strong body structure against corrosive chemical**
5. **One body structure** –
Simple installing and easy wiring due to one body structure of holder and oscillator

SUC-10

SUC-10 Ultrasonic cleaner is used on the purpose of cleaning pH/ORP sensor as ultrasonic oscillator type. This cleaner makes any stains clean continuously, installing on the end of sensors, by the principle of cavitation due to continuous generating of ultrasonic. And SUC-10 has excellent cleaning effects against any fine stained materials by high frequency. Easy application and management by simple installing and solid structure for any processes.



Specifications

	SUC-10
Oscillator Frequency	75KHz sign wave
Ambient Temp.	-5°C ~ 50°C
Construction	Water-Proof
Case Mat'ls	Oscillator: Aluminum, ABS / Guide Pipe: Stainless Steel
Mounting Power Source	50mm Station or Wall Mounting Type / AC100, 50/60Hz / AC220V, 60Hz

Contents

Metering Pump	2
Water Quality Controllers	11
Auto Calibration – pH/ORP	20
Portable/Bench type for lab.	21
Sensors	32
Ultrasonic Cleaner	37
Liquid Control Systems	38



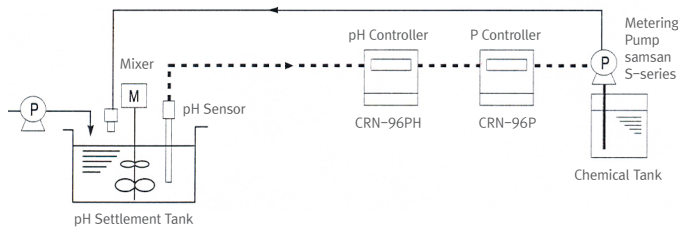
Liquid Control Systems

Applications

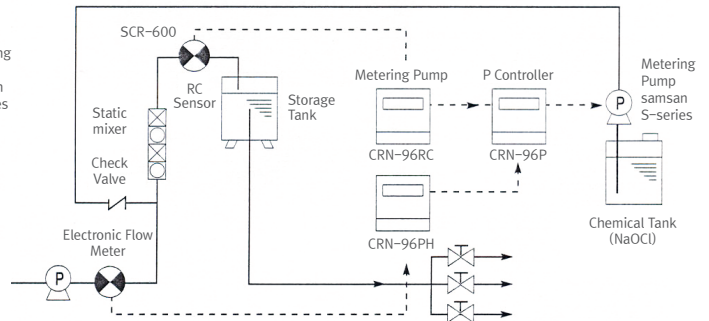
- Cooling Tower Water Control Systems
- pH Automatic control system
- Nutrition Control System
- Automatic proportional Control System
- Sterilizing System of Under-Ground water, Municipal water, Sewer, Waste water
- Injection System for Cleaning pipeline of Boiler, Factory, Building, Apartment
- Water treatment system for automatic car cleaning machine

pH AUTO-CONTROL SYSTEM :

pH Control used with pH controller



STERILIZATION SYSTEM : Gasket Control Type used with Electronic Flow Meter and Residual chlorine controller



Swimming Pool Water Control System

WATER QUALITY MONITOR



CRN-1000
Water Quality Monitor indicates and controls residual chlorine, pH, Oxidation and reduction of ozone by continuous sampling of swimming pool water and it has multi-functions system to keep optimum water quality by automatic controlling with chemical metering pumps and ozone generator

METERING PUMPS

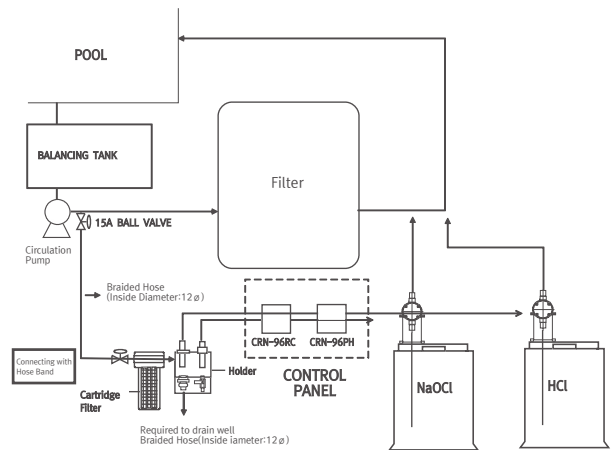


ST-Series



SG-Series

CHEMICAL FEEDING SYSTEM FOR SWIMMING POOL

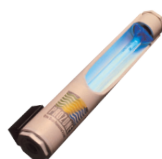


PORTABLE TYPE pH(ORP)/EC TEMP.



PD-501
pH Range: 0.00 ~ 14.00pH
ORP Range: ± 1500mV
Temp. Range: 0 ~ 60°C
EC Range: 0 ~ 1,999µS/cm

OZONE GENERATOR



- Excellent sterilization and stable generating of ozone by applying with UL marked ozone lamp
- Very economical by reducing of chemical consumption
- Keeping good inside environment by reducing of chemical odor

SENSORS



RC Sensor (SCR-600)



pH Sensor (SPH-200V)



ORP Sensor (SOR-400V)

WATER QUALITY CONTROLLERS

CRN-96 ORP
Range: 0 ~ 999mV
Alarm: High, Low Relay
Output: DC4 ~ 20mV



CRN-96 pH
Range: 0.0 ~ 14.0pH
Alarm: High, Low Relay
Output: DC4 ~ 20mV



CRN-96 RC
Range: 0.0 ~ 2.0ppm
Alarm: High, Low Relay
Output: DC4 ~ 20mV



